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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,284	12/21/2000	Dirk Vetter	F-6765	1055

7590 06/23/2004

Jordan and Hamburg  
122 East 42nd Street  
New York, NY 10168

EXAMINER
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HANDY, DWAYNE K

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/720,284	VETTER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dwayne K Handy	1743	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 December 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-6 is/are rejected.
- 7) ☒ Claim(s) 3 and 7-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/21/2000</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Garyantes (6,565,813). Garyantes teaches a device for holding and transferring small volumes of an array of liquid. The device most relevant to the instant claims is best shown in Figures 9A-9E, 10, and 11A-11D. These embodiments are described in columns 6 and 7. As shown in Figures 9A-9E, the device is comprised of a lower storage plate having virtual wells or the conventional wells of a microplate and an upper plate. The upper plate is shown in Figure 10 and is comprised of repeating rows of pins (3) with flat faces (4) for mating with the wells and the liquids contained in the well. When placed together (Figure 9B), the pins of the upper plate are brought into "close proximity" to the storage plate and in contact with the fluid in the wells (column 6, lines 34-43). The term "close proximity" is defined in columns 7-8 as the distance required to transfer fluid either to or from the wells of the lower plate. Garyantes also cites the use of a spacer employed to ensure that the space between the plates is from 100 to 4,000

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microns. The Examiner considers these teachings as meeting the limitation of a "capillary gap". Figure 11 shows an embodiment of the upper pin array that has hydrophilic tips and hydrophobic shafts. Finally, the use of glass for either plate would meet the limitation of a transparent element.

3. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Birch et al. (6,051,190). Birch et al. teach a method and apparatus for transferring and dispensing small volumes of liquid. The device is best shown in Figures 2-3 and described in column 7. The device is comprised of an upper plate or transfer tool (18) having a matrix of rods (10) depending from the lower surface and a lower plate (22) having wells. The rods (10) of the transfer tool (18) mate with the wells of the lower plate lower plate (22) to obtain fluid from the wells. When placed together, the two elements of the device are close enough together that fluid from the wells is transferred to the lower surface (12) of the rods (10). Birch teaches the formation of rods having wettable tips with non-wetting sides in column 5, lines 10-57 and the use of glass in column 4, lines 56-58.

#### ***Allowable Subject Matter***

4. Claims 3 and 7-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In claim 3 applicant places the limitation of the capillary gap having the liquid being partially formed by microbeads. In

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claims 7 applicant adds a porous portion and a further plane to the cover. In claims 8-10 applicant has claimed bores in either component for supplying liquids. These features were not found in the prior art.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reo (6,613,283) shows a vial pack and cover in which the cover has rows of projections that extend into the vials. Schurenberg et al. (6,287,872) recite an upper plate and support plate that are placed together when dispensing liquids through the top plate. Norris et al. (6,432,358) teach a diagnostic device formed by mating two layers. The upper layer has a porous material for flowing samples through. Fisher et al. (6,689,323) teach a dispensing system and method that uses the force of extending members into the bore of a plate to dispense the liquid. Ishikawa et al. (5,888,834) show an immunoassay plate with a lower plate having wells and an upper plate with protrusions that extend into the wells. Birch et al. (6,303,387) repeats the teachings from the earlier cited "Birch" reference. Yershov et al. (6,692,672) teach a dispensing device comprised of inverted cavities.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K Handy whose telephone number is (571)-272-1259. The examiner can normally be reached on M-F 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DKH  
June 21, 2004

  
Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700